



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,259	07/24/2003	Zhong Ding	961_013NP	9582
20874 7590 05/01/2007 MARJAMA & BILINSKI LLP 250 SOUTH CLINTON STREET SUITE 300 SYRACUSE, NY 13202			EXAMINER GORDON, BRIAN R	
			ART UNIT 1743	PAPER NUMBER
			MAIL DATE 05/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/626,259

Applicant(s)

DING ET AL.

Examiner

Brian R. Gordon

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6,9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 9, 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 14, 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed March 14, 2007 have been fully considered but they are not persuasive.

Applicant asserts:

A "read window" for purposes of the invention requires an axial portion or section that will permit direct optical examination of a contained fluid in order to determine properties of the fluid. One such example of a window of this type is defined by Treptow, already cited by the Examiner. As gleaned from the present application and from Treptow, optical measurement, such as through use of a spectrophotometer requires that the fluid be measured through the tip, using for example, a light emitter and detector. To that end, the read window "portion" of the tip should include a continuous axial section having a finite length as well as planar interior and exterior surfaces, as evidenced by Treptow and also by the tip shown in Figs. 11 and 12, by Applicant.

While it may be applicant intent to use the window to perform spectrophotometer analysis as stated, the only structural requirements of claims 1 and 6 are that the "window" be located above a stepped area. As previously indicated in the interview of March 12, 2007 out applicant's tip is a one piece integral structure in which applicant

Art Unit: 1743

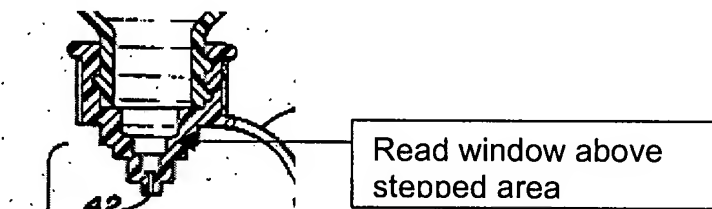
simply chooses to select an section of the tip and refer to it as read window 96. The "read window" is not disclosed as being made of any different material or provided with any other structure that differentiates it from any other portion of the tip. If the entire tip allows for any viewing of material the may be therein, any portion one chooses can be referenced as a "read window". There is no requirement in the claims nor specification that applicant's read window has any specified dimensions as suggested.

It should further be noted that the portion of the claim 6 which states: "a read window that permits an optical instrument to directly measure fluid retained in said axial region therethrough while said tip remains attached to a metering apparatus" is directed to intended use of the device.

The cited optical instrument and metering apparatus are not elements of the tip and has no patentable weight on the structure of the tip. The elements are mentioned in terms of how one could possible use the tip with such other devices.

As to the "latching" and "minimizing of oscillation" affect of a fluid mentioned in the apparatus claims, it should be noted the fluid is not an element of the device. Furthermore the claims recited a desired affect one would like to achieve when using the device. The desired affects are not considered further limiting of the structure. Weather or not the device actually does achieve such affects would not only be determined by the structure but would depend upon a number factors, for example such as the properties of the fluid used with tip, pressure exerted in the tip, direction of flow, and velocity of the fluid used therein. Unless otherwise stated, it is inherent that an equivalent structure would be capable of such affects.

Applicant further asserts how the cap/tip of Hughes is intended to be used with the bottle. An individual can choose to use the cap of Hughes how one chooses and is not limited to using the device only with the bottle structure as disclosed. It should be noted a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. The entire tip/cap is disclosed as being transparent. Any portion of the tip (no specified dimensions) above a stepped area can be considered a read window as claimed.



Applicant further asserts "there is not true axial portion that is separate and distinct from the stepped areas having plane interior and exterior surfaces disposed along the axial length thereof to define read window". Such an argument is not commensurate in scope with that of the claims. As previously stated, the neither claims nor specification define the read window nor stepped areas as being of any specified dimensions (including a length or width). "Stepped area" is a broad term that describes (shape, configuration, or likeness) a general area of the tip. Furthermore, nowhere does the specification define what dimensions of a tip allow for an "optical reading". In terms structure as previously stated an optical instrument (spectrophotometer or any other

Art Unit: 1743

device characterized as such) is not an element of the tip. Furthermore, one can choose to focus a beam a light (laser) in small areas.

The examiner asserts all of the structural limitations as claimed are disclosed in the Hughes reference.

Previously, Treptow et al. was employed for the teaching of a distinct read window. However, as previously stated applicant's tip does not incorporate a distinct window, but simply references a portion of the integral tip material as a read window.

In terms of method, Hughes discloses the device is employed for fluid testing, but does not disclose the cap/tip device as being employed for optical analysis.

Applicant asserts there is no motivation to combine the references. The examiner disagrees. As previously stated, and disclosed in Treptow et al. On the spot optical analysis of a fluid can be performed in a tip of a device such as that disclosed by Hughes.

Applicant further asserts that Hughes is a screw-on cap, therefore it teaches away from the invention. In reference to the structural claims as well as the method claims, there is no structural requirement directed to any means of attachment. Applicant as has stated the cap of Hughes is screw-on, but has failed to provide where such is disclosed in the reference. Even if the cap were disclosed as being screw-on there is no indication that such attachment would prevent an on the spot optical reading from being obtained from the attached cap.

For reasons given herein, the 102 rejections of claim 1 and 103 rejections of claims 3-8 and 10 are hereby maintained.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 78. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 6, and 9, 11-12, and 13-17 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 13 describe there is no support for the area of the tip which applicant regards at the read

Art Unit: 1743

window as being “planar” and of “constant diameter” as claimed. The portion comprising applicant’s “window” 96 appears to be conical or tapered as illustrated in Figure 12.

As to the method claims the examiner fails to locate a step of obtaining a “direct” optical reading of the fluid as to exclude any other object being present between the tip and the fluid. The terms “direct” or “directly” do not appear in the specification. While the drawings may be capable of illustrating an example how the device could be employed the drawings cannot be used in a manner to exclude what could not occur. In this case there is no indication that and indirect reading cannot be obtained.

Furthermore applicant has amended claim 12 to recite sealing and the optical read occurs while the tip remains attached to the metering apparatus. There is no support for such amendment. Applicant’s paragraph [0027] teaches against such amendment stating it is impractical to take reading while the tip is attached and tip is removed and sealed before the optical reading.

Claim 16 suggests a method comprising the steps of aspirating a first portion of a fluid volume from a source, dispensing said first portion to one reaction device, and subsequently aspirating the remaining fluid volume into the tip. Where is support for such a method disclosed?

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1743

7. Claim 9 and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

While claim 9 mentions the tip is capable of permitting for an accurate optical reading. It is unclear if applicant is attempting to claim a step of performing or obtaining an optical reading through the read window as a required action of the method. As presently drafted such a step is not considered as being claimed.

8. Claim 16 recites the limitation "the remaining volume" in 16. There is insufficient antecedent basis for this limitation in the claim. Where is the remaining volume? While claim 13 recites aspirating an initial volume of fluid there is no indication that any other fluid remains.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 6, 9, 11, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughes US 3,449,081.

Hughes discloses a tapered, plastic cap (tip) that includes upper and lower openings and stepped portions therein (see Figures 4 and 6). As given herein above, the examiner asserts the device of Hughes is equivalent to the claimed structure.

As to claims 9 and 11, the cap is attached to a bottle (metering apparatus) fluid is aspirated and dispensed from such cap. Since the cap is structurally equivalent the affects of such structure on moving fluid as recited would be inherent.

Claim Rejections - 35 USC § 103

Art Unit: 1743

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hugs as applied to claims 1, 6, 9, 11, 13-17 above, and further in view of Treptow et al. US 5,844,686.

Hughes does not disclose the plastic cap including a structurally distinguishable window (in anticipation of such an assertion by applicant) not being employed in a method consisting of performing a spectrophotometric read of fluid in the cap (claim 12).

Treptow et al. disclose an apparatus for pipetting and photometrically evaluating samples which comprise a pipetting means, an integrated photometer and a replaceable pipette tip connected to said pipetting means, said pipette tip being defined as a cell and provided within the optical path of the photometer for photometrically evaluating absorbed samples (abstract).

The pipette tip 4 within the area of the optical path 6, 7 comprises two plane-parallel windows 8, 9 on opposite sides of its wall.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cap/tip of Hughes et al to incorporate the optical windows as taught by Treptow in order to provide a cap of test kit to allow for "on-the-spot"-analytics of the samples.

As to the method claims, it would have been obvious to recognize that upon aspirating fluid in the modified structure of Hughes, the same steps of the claim method would occur.

13. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lukacs et al., US 3,780,935 and Treptow et al.

Lukacs et al. discloses all of the claimed structural limitations (see figure 6) except for a read window.

Art Unit: 1743

Treptow et al. disclose an apparatus for pipetting and photometrically evaluating samples through a window.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dispensing device of Lukacs et al to incorporate the optical windows as taught by Treptow in order to provide a cap of test kit to allow for "on-the-spot"-analytics of the samples.

It would have further been obvious to recognize the device maybe manufactured from conventional transparent material such as glass or plastic thereby establishing a read window.

Conclusion

14. No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, Telework Thurs., 1st Fri. Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brian R Gordon
Primary Examiner
Art Unit 1743

brg

BRIAN R. GORDON
PRIMARY EXAMINER